learners experience compared to stationary simulation center. **Conclusion:** Input from a heterogeneous group of simulation users was sought to help prioritize key features in the development of the Mobile Tele-simulation Unit. Although statistically the study did not reach consensus, valuable feedback was compiled and pragmatically applied in the iterative development cycle.

**Keywords:** simulation-based medical education, simulation education, telemedicine

### P040
**Describing antibiotic utilization and uptake of the chronic obstructive pulmonary disease order set in Saskatoon emergency departments**
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**Introduction:** Chronic obstructive pulmonary disease (COPD) is one of the leading causes of morbidity and mortality in Canada. The Anthonisen criteria utilizes the cardinal symptoms of acute exacerbations of COPD (AECOPD), increased shortness of breath, increased sputum production, and increased sputum purulence, to determine which patients should receive antibiotics. In July 2015, a COPD Order Set Pilot was implemented in Saskatoon emergency departments (ED). The order set utilizes the Anthonisen criteria to optimize AECOPD patient management and ensure appropriate antibiotic usage. By January 2019, we aim to optimize AECOPD patient management in Saskatoon ED. We aim to increase physician uptake of the order set to 50% and to increase appropriate antibiotic prescription to 90%.

**Methods:** Our project was designed following the Plan-Do-Study-Act method. Our primary outcome was to measure the rate of appropriate antibiotic prescription when managing AECOPD patients. Our secondary outcome was to measure physician uptake of the order set. We hypothesized that 80% of AECOPD patients would be managed with antibiotics appropriately and that 25% of emergency physicians would utilize the order set. A chart review was conducted examining AECOPD patient management in Saskatoon ED. The study period included the 6 months following the implementation of the order set. Our inclusion criteria were patients diagnosed with AECOPD and managed in the ED. Our exclusion criteria were patients currently prescribed antibiotics or patients requiring inpatient admission. A convenience sample of 125 charts was selected for review, enabling an accurate representation of order set utilization and antibiotic usage. A secondary reviewer abstracted a random 15% sample of the charts to ensure validity of the data.

**Results:** Our results showed that, during our study period, none of the AECOPD patients were managed with the order set. Of the patients receiving antibiotic therapy, only 32 of the 53 (60.38%) met the Anthonisen criteria and were appropriately prescribed antibiotics. Of the patients not given antibiotics, 15 of the 42 (35.71%) met the Anthonisen criteria and should have been managed with antibiotics. These results refruted both of our hypotheses.

**Conclusion:** As COPD is one of the leading causes of morbidity and mortality in Canada, proper management is crucial. Our results state that uptake of the order set is low and that antibiotic utilization is not optimized. These results demonstrate the need to modify and promote the current order set. We believe that by encouraging the use of the order set and streamlining the management guidelines, we can increase physician uptake. This will subsequently increase appropriate antibiotic prescription and improve AECOPD patient care. A second identical chart review for 2017 has been completed. Data analysis will be finalized prior to the conference.

**Keywords:** quality improvement and patient safety, acute exacerbation of chronic obstructive pulmonary disease, antibiotics

### P041
**Patient perspectives on emergency department use for acute atrial fibrillation: a qualitative study using the theoretical domains framework**
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**Introduction:** Acute atrial fibrillation (AAF) is the most common arrhythmia managed in the Emergency Department (ED). Direct costs of AAF are primarily attributed to ED visits and subsequent admission to hospital. A better understanding of patients' attitudes regarding ED attendance is necessary to develop strategies to improve the patient care experience while simultaneously reducing ED presentation and inappropriate hospital admissions. This study aims to describe patient perspectives on ED use for AAF using in-depth qualitative interviews.

**Methods:** An interview template designed to explore why patients attend the ED for AAF was conducted based on the Theoretical Domains Framework, a theory-informed approach that utilizes 14 domains to describe influencers of behavior. We conducted audio-recorded, semi-structured interviews of patients following their presentation to the ED for management of AAF. Interviews were anonymized, transcribed and imported into NVivo for coding and analysis. Two independent reviewers used a direct approach to code participant statements. Discrepancies were resolved by a third party. Belief statements were generated and relevant domains identified based on high frequency scores, conflicting belief statements or evidence of strong influencing beliefs.

**Results:** 12 patient interviews, mean age 63.1 years, 91.7% male, 75.0% recurrent AAF, were completed. Patients stated that they attended the ED because: 1) symptom severity; 2) they were instructed by physicians to attend the ED should their AAF recur; and 3) they were encouraged by family members to attend. Their primary goal was to have relief of their symptoms. There was no expectation of specialist consultation or admission to hospital. Even though most patients stated they were open to managing these episodes independently, they reported that they did not have the knowledge or tools to do so.

**Conclusion:** Patients with AAF present to the ED because of their symptom burden, social influences (physician and family) and lack of other management options. This study demonstrates the need for development of patient self-management strategies which will empower patients in their disease management and may decrease future ED visits.

**Keywords:** acute atrial fibrillation

### P042
**Resuscitative endovascular balloon occlusion of the aorta (REBOA) in trauma: a systematic review**
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**Introduction:** Trauma leading to uncontrolled hemorrhage of the torso in the critically injured patient can rapidly progress to decreased cerebral and cardiovascular perfusion and carries a significant morbidity and mortality. Given the non-compressible nature and difficult anatomic access of these injuries, obtaining hemostasis is often a challenge and non-surgical options are sparse. Resuscitative Endovascular Balloon Occlusion of the Aorta (REBOA) is a rapidly administered emergency department intervention that allows transient source control of caudal